PATENT CLAIMS

1. An apparatus for capacitively determining a position of a counter wheel (1), where fixed electrodes (3, 3') are arranged at a distance from the counter wheel (1), and the counter wheel (1) has means for changing a capacitance on the basis of position, characterized in that the means for changing the capacitance on the basis of position are a sequence of measurement electrodes (12, 12', 12'') extending over the circumference of the counter wheel (1), and electrically nonconductive sections (13, 13') arranged between said measurement electrodes.

2. The apparatus as claimed in claim 1, characterized in that the fixed electrodes (3, 3') are arranged along the circumference of the counter wheel (1).

3. The apparatus as claimed in claim 1, characterized in that the counter wheel has a body made of an electrically nonconductive material.

4. The apparatus as claimed in claim 1, characterized in that the counter wheel (1) has a body (10) made of an electrically conductive material having recesses (11) which are distributed over the circumference and contain electrically nonconductive inserts (14).

5. The apparatus as claimed in claim 1, characterized in that the fixed electrodes (30, 31) are combined in pairs, in that all the measurement electrodes (12) on the counter wheel (1) are of the same length and in that each pair is of a common length which corresponds to the length of the measurement electrodes (12) on the counter wheel.

6. The apparatus as claimed in claim 5, characterized in that each pair of electrodes comprises a transmitter electrode and a receiver electrode (30,

31), with adjacent electrodes in two adjacent pairs being of the same type.

7. The apparatus as claimed in claim 1, characterized in that an opposing electrode (4) is provided which extends along at least half the circumference of the counter wheel (1) at a distance therefrom.

8. The apparatus as claimed in one of claims 5 or 7, characterized in that four fixed electrodes (3') or four electrode pairs (3) are provided.

9. The apparatus as claimed in claim 1, characterized in that the distance between the measurement electrodes (12, 12', 12'') and the fixed electrodes (3, 3'), which are respectively opposite them, according to the position of the counter wheel, is at least approximately the same.

10. The apparatus as claimed in claims 5 and 7, characterized in that the sequence distributed over the circumference is implemented as shown in figure 3.